

## CLAIMS

Therefore, having thus described the invention, at least the following is claimed:

1        1.        An encapsulated weight system for resistance training, comprising:  
2                a first dumbbell comprising a center portion having a borehole disposed axially  
3        therein forming an interior load area being defined by a length and a diameter;  
4                a first end cap being arranged and configured to engage an end of said first  
5        dumbbell;  
6                a second end cap being arranged and configured to engage an end of said first  
7        dumbbell;  
8                at least one weight capsule being arranged and configured to substantially  
9        correspond to said diameter of said interior load area of said first dumbbell;  
10                at least one spacer capsule being arranged and configured to substantially  
11        correspond to said diameter of said interior load area of said first dumbbell, said spacer  
12        capsule weighing less than said weight capsule;  
13                wherein at least one of said weight capsule and said spacer capsule can be  
14        disposed in said interior load area of said first dumbbell such that said capsule fills the  
15        interior load area of said dumbbell.

1        2.        The encapsulated weight system of claim 1, wherein:  
2                said first end cap of said first dumbbell comprises a stop for preventing at least  
3        one of said weight capsule and said spacer capsule from passing through said interior load  
4        area of said first dumbbell.

1        3.        The encapsulated weight system of claim 1, further comprising:

2                a second dumbbell comprising a center portion having a borehole disposed axially  
3        therein forming an interior load area being defined by a length and a diameter;

4                a first end cap being arranged and configured to engage an end of said second  
5        dumbbell;

6                a second end cap being arranged and configured to engage an end of said second  
7        dumbbell;

8                wherein at least one of said weight capsule and said spacer capsule can be  
9        disposed in said interior load area of said second dumbbell such that said capsule fills the  
10       interior load area of said second dumbbell.

1        4.        The encapsulated weight system of claim 3, wherein:

2                said first end cap of said second dumbbell comprises a stop for preventing at least  
3        one of said weight capsule and said spacer capsule from passing through said interior load  
4        area of said second dumbbell.

1        5.        The encapsulated weight system of claim 3, further comprising:

2                a barbell adapter being arranged and configured to releasably receive said first  
3        dumbbell and said second dumbbell at opposing ends of said barbell adapter;

4                wherein one of said first end cap and said second end cap of said first dumbbell is  
5        disposed on said first dumbbell and one of said first end cap and said second end cap of  
6        said second dumbbell is disposed on said second dumbbell.

1        6.        An encapsulated weight system for resistance training, comprising:

2                a first dumbbell comprising a center portion having opposing ends and a borehole  
3 disposed axially therein forming an interior load area defined by a length and a diameter,  
4 said first dumbbell having a first end cap being adapted to releasably engage one of said  
5 opposing ends of said center portion;

6                a second dumbbell comprising a center portion having opposing ends and a  
7 borehole disposed axially therein forming an interior load area defined by a length and a  
8 diameter, said second dumbbell having a first end cap being adapted to releasably engage  
9 one of said opposing ends of said center portion;

10               at least one weight capsule being arranged and configured to substantially  
11 correspond to said diameter of said interior load area of at least one of said first dumbbell  
12 and said second dumbbell;

13               at least one spacer capsule being arranged and configured to substantially  
14 correspond to said diameter of said interior load area of at least one of said first dumbbell  
15 and said second dumbbell;

16               a stop means for preventing at least one of said weight capsule and said spacer  
17 capsule from passing through said interior area into which at least one of said weight  
18 capsule and said spacer capsule is introduced.

1        7.        The encapsulated weight system of claim 6, wherein said stop means comprises a  
2 second end cap.

1        8.        The encapsulated weight system of Claim 7, wherein said first dumbbell includes  
2        a second end cap arranged and configured to engage said first dumbbell opposing said  
3        first end cap and said second dumbbell includes a second end cap arranged and  
4        configured to engage said second dumbbell opposing said first end cap.

1        9.        The encapsulated weight system of claim 7, wherein said stop means is fixed to at  
2        least one of said first dumbbell and said second dumbbell.

1        10.       The encapsulated weight system of claim 9, further comprising a barbell adapter  
2        arranged and configured to engage said first dumbbell and said second dumbbell at  
3        opposing ends of said barbell adapter such that said barbell adapter engages each of said  
4        first dumbbell and said second dumbbell opposing said second end cap of said first  
5        dumbbell and said second dumbbell.

1        11.       The encapsulated weight system of claim 6, wherein said stop means releasably  
2        engages at least one of said first dumbbell and said second dumbbell on an end opposing  
3        said first end cap.

1        12.       The encapsulated weight system of claim 11, further comprising:  
2                a barbell adapter being arranged and configured to releasably receive said first  
3        dumbbell and said second dumbbell at opposing ends of said barbell adapter.

1        13.     An encapsulated weight system for resistance training, comprising:

2             a first dumbbell comprising a center portion having opposing ends and a borehole  
3        disposed axially therein forming an interior load area defined by a length and a diameter,  
4        said first dumbbell having a first end cap being adapted to releasably engage one of said  
5        opposing ends of said center portion;

6             a second dumbbell comprising a center portion having opposing ends and a  
7        borehole disposed axially therein forming an interior load area defined by a length and a  
8        diameter, said second dumbbell having a first end cap being adapted to releasably engage  
9        one of said opposing ends of said center portion;

10            a barbell adapter being arranged and configured to releasably receive said first  
11        dumbbell and said second dumbbell at opposing ends of said barbell adapter;

12            a plurality of weight capsules, each of said plurality of weight capsules being  
13        arranged and configured to be disposed within said interior load area of said first  
14        dumbbell and said second dumbbell; and

15            a plurality of spacer capsules, each of said spacer capsules being arranged and  
16        configured to be disposed within said interior load area of said first dumbbell and said  
17        second dumbbell;

18            wherein said first dumbbell is releasably fixed to an end of said barbell adapter  
19        such that said first end cap of said first dumbbell opposes said barbell adapter and said  
20        first end cap of said second dumbbell opposes said barbell adapter and a combination of  
21        said capsules is disposed in said first dumbbell between said barbell adapter and said first  
22        end cap of said first dumbbell and a combination of said capsules is disposed in said  
23        second dumbbell between said barbell adapter and said first end cap of said second

24       dumbbell.

1       14.     The encapsulated weight system of claim 13, further comprising:  
2             a stop means for containing at least one of said plurality of capsules in said  
3       interior load area into which said capsule is disposed.

1       15.     The encapsulated weight system of claim 14 wherein said stop means comprises  
2       at least one of said first end cap of said first dumbbell and said first end cap of said  
3       second dumbbell.

1       16.     The encapsulated weight system of claim 13, further comprising:  
2             at least one second end cap arranged and configured to engage one of said first  
3       dumbbell and said second dumbbell opposing said first end cap arranged and configured  
4       to engage the same of said first dumbbell and said second dumbbell.